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**(54) RARE EARTH PERMANENT MAGNET AND ITS
MANUFACTURE**

(57) Abstract:

PURPOSE: To provide high-performance magnet material which has excellent orientation by suppressing magnetic powder coagulation, allowing orientation within the magnetic field and molding and sintering the powder.

CONSTITUTION: $R_2Fe_{14}B$ intermetallic compound is made the major phase. (R is at least one of rare earth elements which contain Nd, Pr, Ce and Dy). The value of $I(006)/I(105)$ is made 1.0 or more for forming vertical magnetic field and 0.8 or more for forming horizontal magnetic field. (The value $I(006)/I(105)$ indicates the X-ray diffraction strength of the (006) plane and the (105) plane of Nd_2Fe_{14} crystal. The condition of X-ray irradiation is a Cu target and $2\theta/\theta$; scan).

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